REMARKS

In response to the Office Action mailed May 19, 2009, the Assignee (Nuance Communications, Inc.) respectfully requests reconsideration. Claims 14-28 were previously pending in this application. By this amendment, claims 14, 17-19 and 24 are amended. No claims are added or canceled. As a result, claims 14-28 are pending for examination, with claims 14, 19 and 24 being independent.

Rejections Under 35 U.S.C. §112

The Office Action rejects claims 14-18 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, the Office Action alleges that the phrase "adapted to implement" leaves it unclear as to whether the following limitations are required. While the Assignee believes that claims 14-18 are definite as previously presented, claims 14-18 are amended to address the Examiner's concern. Claim 14 has been amended to recite "at least one processor capable of receiving the information from the plurality of reception stages, the at least one processor programmed to:," followed by a recitation of a number of acts that the at least one processor must be programmed to perform. Accordingly, claim 14 is believed to be definite in satisfaction of 35 U.S.C. §112, ¶2.

Claims 17 and 18 are amended for consistency with amended claim 14. Accordingly, the Assignee respectfully requests the rejection of claims 14-18 under 35 U.S.C. §112 be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 14, 15, 19, 20, 24 and 25 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Martino et al. (US Patent 6,061,646) in view of Coffman et al. (US Patent 6,377,913) in further view of Dobler (US Publication 2005/0038652). The Assignee respectfully traverses the rejection.

A.   Overview of Embodiments

In the following overview, citations are obtained from the published application, U.S. Publication No. 2006/0074667. Some embodiments are directed to providing a transcription of a

conference between a plurality of participants (¶ 84). Each participant may be provided with a microphone to capture speech information from the participant when speaking (¶ 41). The information produced at each of the microphones may be received and analyzed to identify which one contains speech information for a given time interval (¶ 47). A transmission channel associated with the speaking participant may be identified as the in-use channel (¶ 47). The speech information received at the in-use channel may then be further processed (e.g., language determination, speech recognition, etc.) rather than processing information received from each of the transmission channels (¶ 77).

It should be appreciated that the foregoing discussion of embodiments of the invention is provided merely to assist the Examiner in appreciating various aspects of the present invention. However, not all of the description provided above necessarily applies to each of the independent claims pending in the application. Therefore, the Examiner is requested to not rely upon the foregoing summary in interpreting any of the claims or in determining whether they patentably distinguish over the prior art of record, but rather is requested to rely only upon the language of the claims themselves and the arguments specifically related thereto provided below.

B.   Overview of Martino

Martino is directed to a kiosk that can respond to a natural language inquiry from users in different languages (Column 1, lines 5-10). In Martino, the language spoken by the user is first recognized by counting the number of words in the natural language inquiry that match a small dictionary of common words in each of the languages the kiosk is configured to recognize (Column 5, line 2- - column 7, line 22). Once the language has been identified, the natural language inquiry may be recognized using a recognizer adapted for the specific identified language (Columns 7-9).

C.   Overview of Coffman

Coffman describes a system that allows a user to use different types of client devices (computer, telephone, etc.) to access information from a conversational system (col. 3, lines 14-23; FIG. 2). The user connects to the system using the client device (col. 3, lines 39-40; FIG. 5, step 602). Once connected, the user may speak a request into the device (e.g., "do I have any new mail"). The system converts the spoken request into a command (check_new_mail()) (col.

4, lines 24-32). The command is processed and the result is returned to the user in a format suitable to the user's device (col. 4, lines 35-59).

D.   The Claims Patentably Distinguish Over the Alleged Combination

As discussed above, Martino is directed to a kiosk that recognizes the language of a speaker and thereafter prompts the speaker in the detected language. Martino has nothing to do *a conference between a plurality of participants* over a plurality of transmission channels or with identifying an in-use channel during a given interval of the conference. In Martino, multiple users may interact with the kiosk, but nowhere do the users participate in a conference among multiple users. Coffman is directed to a conversational system that interacts with a plurality of client devices in a manner consistent with the type of client device. However, Coffman is completely silent with respect to a conference between a plurality of participants and identifying an in-use channel by determining which of the participants is speaking during a given interval. Dobler does not cure any of the deficiencies of Martino or Coffman discussed above. Accordingly, none of Martino, Coffman or Dobler, either alone or in combination, disclose or suggest each of the limitations in the claims, as discussed in further detail below.

i.   *Claims 14-18*

Claim 14, as amended, recites a system for providing transcription of a conference between a plurality of participants of the conference. The system comprises:

> *a plurality of reception stages to receive information from the plurality of participants over a respective plurality of transmission channels*; and
>
> at least one processor capable of receiving the information from the plurality of reception stages, the at least one processor programmed to:
>
> > *analyze the information received at the plurality of reception stages to determine which of the plurality participants in the conference is speaking during a given time interval based, at least in part, on identifying which of the plurality of reception stages is receiving speech information*;
> >
> > select one of the plurality of transmission channels corresponding to the reception stage identified as receiving speech information as an in-use channel;
> >
> > determine channel information including at least one transmission parameter of the in-use channel;

extract at least one feature vector from the speech information based, at least in part, on the channel information;

perform acoustic segmentation of the speech information to generate acoustic segmentation information indicating at least one segment identified in the speech information based, at least in part, on the channel information and the at least one feature vector, the acoustic segmentation information including a label for the at least one segment of the speech information indicating whether the at least one segment is associated with speech, a pause in speech or non-speech;

determine a language of the speech information based, at least in part, on the channel information, the at least one feature vector and the acoustic segmentation information; and

generate text information corresponding to words recognized in the speech information based, at least in part, on the channel information, the at least one feature vector, the acoustic segmentation information and the language. (Emphasis added).

Nowhere does the alleged combination of Martino, Coffman and Dobler disclose or suggest at least the above emphasized limitations in claim 14. Therefore, claim 14 patentably distinguishes over the alleged combination and is in allowable condition. Claims 15-18 depend from claim 14 and are allowable for at least the same reasons.

ii.   *Claims 19-28*

Claim 19 recites a method of providing transcription of a conference between a plurality of participants of the conference and claim 24 recites a computer readable storage device encoded with a plurality of instructions for execution on at least one processor, the plurality of instructions, when executed on the at least one processor, performing such a method. The method comprises:

receiving information over a plurality of transmission channels from the plurality of participants;

analyze the information received at the plurality of reception stages to determine which of the plurality of participants of the conference is speaking during a given time interval based, at least in part, on identifying which of the plurality of reception stages is receiving speech information;

selecting one of the plurality of transmission channels corresponding to the reception stage identified as receiving speech as an in-use channel;

determining channel information including at least one transmission parameter of that identifies the in-use channel;

extracting at least one feature vector from the speech information based, at least in part, on the channel information;

performing acoustic segmentation of the speech information to generate acoustic segmentation information indicating at least one segment identified in the speech information based, at least in part, on the channel information and the at least one feature vector, the acoustic segmentation information including a label for the at least one segment of the speech information indicating whether the at least one segment is associated with speech, a pause in speech or non-speech;

determining a language of the speech information based, at least in part, on the channel information, the at least one feature vector and the acoustic segmentation information; and

generating text information corresponding to words recognized in the speech information based, at least in part, on the channel information, the at least one feature vector, the acoustic segmentation information and the language of the speech information

Nowhere does the alleged combination of Martino, Coffman and Dobler disclose or suggest at least the above emphasized limitations in claim 19 and 24. Therefore, claims 19 and 24 patentably distinguish over the alleged combination and are in allowable condition. Claims 19-23 amd 25-28 depend from claims 19 and 24, respectively, and are allowable for at least the same reasons.

General Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, for the sake of brevity, the Assignee believes that it is unnecessary at this time to argue the further distinguishing features of the dependent claims. However, the Assignee reserves the right to specifically address the further patentability of the dependent claims in the future.

General Comments on the Alleged Combination

The Assignee does not accede to the correctness of the allegation that one of ordinary skill in art would have been motivated to combine Martino, Coffman and Dobler or that the combination would result in a system as alleged in the Office Action. However, because the alleged combination does not disclose or suggest each limitation in the claims, it unnecessary to argue against the alleged combination at this time. The Assignee reserves the right to argue against such a combination in the future.
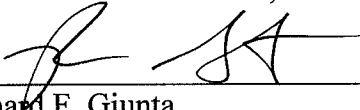
CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance. A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed, or which should have been filed herewith to our Deposit Account No. 23/2825, under Docket No. N0484.70058US00 from which the undersigned is authorized to draw.

Dated: August 19, 2009

Respectfully submitted,
Nuance Communications, Inc.

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